Amendments to the Claims

Please amend claims 1, 20, 26, and add new claims 41-43 as indicated below.

All claims are listed below, with amended claims so marked. This listing of claims will

replace all prior versions, and listings, of claims in the application:

1   1.   (Currently Amended) A method for a proxy to transparently provide access

2   to resources of a resource manager, comprising:

3   receiving from the client a resource locator for retrieving a resource of a selected

4   resource manager of a set of ~~the~~ resource managers disposed within different

5   machines, wherein the resource locator comprises a network address of the resource

6   manager and the resource locator is at least partially obscured to hide the network

7   address;

8   ~~validating client authorization to access the resource;~~

9   de-obscuring the resource locator;

10   retrieving a first portion of the resource from the resource manager according to

11   the de-obscured resource locator, and a second portion of the resource from a second

12   selected resource manager of said set of resource managers according to the de-

13   obscured resource locator; and

14   providing the resource to the client such that it appears to have originated from

15   the proxy.

1   2.   (Original) The method of claim 1, wherein the proxy comprises a front end

2   manager and a back end manager, the method further comprising:

3   receiving a first proxy header corresponding to the request, the first proxy header

4   identifying the client as the source of the request and the front end manager as the

5   source of the resource; and

6   preparing a second proxy header by rewriting the first proxy header so as to

7   substitute the back end manager for the client, and the resource manager for the front

8   end manager;

9   wherein retrieving the resource from the resource manager comprises the back

10   end manager providing the second proxy header to the resource manager.

1   3.   (Original) The method of claim 1, further comprising:

2   receiving a first proxy header corresponding to the request, the first proxy header

3   identifying the client as the source of the request and the proxy as the source of the

4   resource; and

5   preparing a second proxy header by rewriting the first proxy header so as to

6   substitute the proxy for the client, and the resource manager for the proxy;

7   wherein retrieving the resource from the resource manager comprises providing

8   the second proxy header to the resource manager.

1   4.   (Original) The method of claim 3, further comprising:

2   receiving a third proxy header from the resource manager, the third proxy header

3   identifying the resource manager as the source of the resource, and the proxy as the

4   recipient of the resource; and

5   preparing a fourth proxy header by rewriting the third proxy header so as to

6   substitute the proxy as the source of the resource, and the client as the recipient of the

7   resource;

8   wherein providing the resource to the client comprises providing the fourth proxy

9   header to the client.

1   5.   (Previously Presented) The method of claim 3, wherein the resource is

2   formatted according to a tag based language.

1   6.   (Previously Presented) The method of claim 5, wherein the tag based

2   language is a selected one of: the HyperText Markup Language (HTML), and the

3   eXtensible Markup Language (XML).

1   7.   (Original) The method of claim 3, wherein the first proxy header comprises

2   a content type identifier identifying a desired format for the resource, and wherein the

3   resource manager stores the resource in a second format different from the desired

4   format, the method further comprising:

5   converting the resource from the second format to the first format.

1   8.   (Original) The method of claim 1, further comprising:

2   receiving a content type identifier from the client identifying a desired format in

3   which to provide the resource to the client; and

4   converting the resource from a different format utilized by the resource manager

5   into the desired format.

1   9.   (Original) The method of claim 1, wherein the network comprises multiple

2   resource managers providing access to the resource, the method further comprising:

3   retrieving portions of the resource from selected ones of the multiple resource

4   managers.

1   10.   (Original) The method of claim 9, wherein the portions are retrieved in

2   parallel from the selected ones of the multiple resource managers.

1   11.   (Original) The method of claim 10, further comprising:

2   determining loads for the multiple resource managers; and

3   selecting among the multiple resource managers according to the loads.

1   12.   (Original) The method of claim 11, wherein the portions are non-

2   overlapping portions of the resource.

1   13.   (Original) The method of claim 1, further comprising:

2   the resource locator comprising a Uniform Resource Locator (URL); and

3   inspecting the URL for a path component indicating the URL comprises the at

4   least partially obscured portion.

1   14.   (Original) The method of claim 1, wherein de-obscuring the resource

2   locator comprises providing at least the obscured portion of the resource locator to a

3   location manager, and receiving a de-obscured identifier responsive thereto.

1   15.   (Original) The method of claim 14, wherein the location manager performs

2   the validating client authorization to access the resource.

1   16.   (Original) The method of claim 1, wherein validating client authorization to

2   access the resource comprises providing the at least partially obscured portion of the

3   resource locator, and an identity identifier for the client to an authorization manager.

1   17.   (Original) The method of claim 1, wherein validating client authorization to

2   access the resource comprises:

3   hash-encoding an identity value associated with the client; and

4   providing the hash-encoded identity value and at least a portion of the resource

5   locator to an authorization manager configured to look up the hash-encoded identity

6   value and the at least a portion of the resource locator in an access control table.

1   18.   (Original) The method of claim 1, wherein the client communicates with

2   the proxy by way of an Internet browser.

1   19.   (Original) The method of claim 1, wherein the proxy comprises a front end

2   manager and a back end manager, wherein the client only communicates with the front

3   end manager for obtaining the resource, and wherein the back end manager obtains the

4   resource from the resource manager.

1   **20.**   (Currently Amended) A system, comprising:

2   a network communicatively coupling a client, a resource manager providing

3   access to its resources, and a proxy comprising a front end manager and a back end

4   manager, wherein the proxy is configured to perform a method comprising:

5   receiving from the client a resource locator for retrieving a resource of <u>a selected</u>

6   <u>resource manager of a set of</u> ~~the~~ resource manager<u>s disposed within different</u>

7   <u>machines</u>, wherein the resource locator comprises a network address of the resource

8   manager and the resource locator is at least partially obscured to hide the network

9   address;

10   ~~validating client authorization to access the resource;~~

11   de-obscuring the resource locator;

12   retrieving a first portion of the resource from the resource manager according to

13   the de-obscured resource locator, and a second portion of the resource from a second

14   <u>selected</u> resource manager <u>of said set of resource managers</u> according to the de-

15   obscured resource locator; and

16   providing the resource to the client such that it appears to have originated from

17   the proxy.

1   21.   (Original) The system of claim 20, wherein the proxy is further configured

2   to perform:

3   receiving a first proxy header corresponding to the request, the first proxy header

4   identifying the client as the source of the request and the proxy as the source of the

5   resource; and

6   preparing a second proxy header by rewriting the first proxy header so as to

7   substitute the proxy for the client, and the resource manager for the proxy;

8   wherein retrieving the resource from the resource manager comprises providing

9   the second proxy header to the resource manager.

1   22.   (Original) The system of claim 21, wherein the proxy is further configured

2   to perform:

3   receiving a third proxy header from the resource manager, the third proxy header

4   identifying the resource manager as the source of the resource, and the proxy as the

5   recipient of the resource; and

6   preparing a fourth proxy header by rewriting the third proxy header so as to

7   substitute the proxy as the source of the resource, and the client as the recipient of the

8   resource;

9   wherein providing the resource to the client comprises providing the fourth proxy

10 header to the client.

1   23.   (Original) The system of claim 20, wherein the resource locator comprises

2   a Uniform Resource Locator (URL), and wherein the proxy is further configured to

3   perform:

4   inspecting the URL for a path component indicating the URL comprises the at

5   least partially obscured portion.

1   24.   (Original) The system of claim 20, wherein validating client authorization to

2   access the resource comprises:

3   hash-encoding an identity value associated with the client; and

4   providing the hash-encoded identity value and at least a portion of the resource

5   locator to an authorization manager configured to look up the hash-encoded identity

6   value and the at least a portion of the resource locator in an access control table.

Application No. 09/904,646
Amendment dated December 19, 2005
Response to Office Action of March 7, 2005

Atty. Docket No. 042390.P10469
Examiner Strange, Aaron
TC/A.U. 2153

1   25.   (Original) The system of claim 20, wherein the client communicates with

2   the proxy by way of an Internet browser.

1   **26.**   (Currently Amended) A machine accessible medium having instructions

2   encoded thereon, which when executed by at least one processor, are capable of

3   directing the at least one processor to perform:

4   receiving from a client a resource locator for retrieving a resource of a resource

5   manager, wherein the resource locator comprises a network address of a selected

6   resource manager of a set of the resource managers disposed within different machines

7   and the resource locator is at least partially obscured to hide the network address;

8   ~~validating client authorization to access the resource;~~

9   de-obscuring the resource locator;

10   retrieving a first portion of the resource from the resource manager according to

11   the de-obscured resource locator, and a second portion of the resource from a second

12   selected resource manager of said set of resource managers according to the de-

13   obscured resource locator; and

14   providing the resource to the client such that it appears to have originated from

15   the proxy.

1   27.   (Original) The medium of claim 26, wherein the proxy comprises a front

2   end manager and a back end manager, and wherein the instructions comprise further

3   instructions capable of directing the at least one processor to perform:

Application No. 09/904,646
Amendment dated December 19, 2005
Response to Office Action of March 7, 2005

Atty. Docket No. 042390.P10469
Examiner Strange, Aaron
TC/A.U. 2153

4   receiving a first proxy header corresponding to the request, the first proxy header

5   identifying the client as the source of the request and the front end manager as the

6   source of the resource; and

7   preparing a second proxy header by rewriting the first proxy header so as to

8   substitute the back end manager for the client, and the resource manager for the front

9   end manager;

10   wherein retrieving the resource from the resource manager comprises the back

11   end manager providing the second proxy header to the resource manager.

1   28.   (Original) The medium of claim 26, wherein the instructions comprise

2   further instructions capable of directing the at least one processor to perform:

3   receiving a first proxy header corresponding to the request, the first proxy header

4   identifying the client as the source of the request and the proxy as the source of the

5   resource; and

6   preparing a second proxy header by rewriting the first proxy header so as to

7   substitute the proxy for the client, and the resource manager for the proxy;

8   wherein retrieving the resource from the resource manager comprises providing

9   the second proxy header to the resource manager.

1   29.   (Original) The medium of claim 28, wherein the instructions comprise

2   further instructions capable of directing the at least one processor to perform:

3   receiving a third proxy header from the resource manager, the third proxy header

4   identifying the resource manager as the source of the resource, and the proxy as the

5   recipient of the resource;

6   preparing a fourth proxy header by rewriting the third proxy header so as to

7   substitute the proxy as the source of the resource, and the client as the recipient of the

8   resource; and

9   wherein providing the resource to the client comprises providing the fourth proxy

10   header to the client.

1   30.   (Previously Presented) The medium of claim 28, wherein the resource is

2   formatted according to a tag based language.

1   31.   (Previously Presented) The medium of claim 30, wherein the tag based

2   language is a selected one of: the HyperText Markup Language (HTML), and the

3   eXtensible Markup Language (XML).

1   32.   (Original) The medium of claim 28, wherein the first proxy header

2   comprises a content type identifier identifying a desired format for the resource, and

3   wherein the resource manager stores the resource in a second format different from the

4   desired format, wherein the instructions comprise further instructions capable of

5   directing the at least one processor to perform:

6   converting the resource from the second format to the first format.

1   33.   (Original) The medium of claim 26, wherein the instructions comprise

2   further instructions capable of directing the at least one processor to perform:

3   receiving a content type identifier from the client identifying a desired format in

4   which to provide the resource to the client; and

Application No. 09/904,646
Amendment dated December 19, 2005
Response to Office Action of March 7, 2005

Atty. Docket No. 042390.P10469
Examiner Strange, Aaron
TC/A.U. 2153

5   converting the resource from a different format utilized by the resource manager

6   into the desired format.

1   34.   (Original) The medium of claim 26, wherein the network comprises

2   multiple resource managers providing access to the resource, and wherein the

3   instructions comprise further instructions capable of directing the at least one processor

4   to perform:

5   retrieving portions of the resource from selected ones of the multiple resource

6   managers.

1   35.   (Original) The medium of claim 34, wherein the portions are retrieved in

2   parallel from the selected ones of the multiple resource managers.

1   36.   (Original) The medium of claim 35, wherein the instructions comprise

2   further instructions capable of directing the at least one processor to perform:

3   determining loads for the multiple resource managers; and

4   selecting among the multiple resource managers according to the loads.

1   37.   (Original) The medium of claim 36, wherein the portions are non-

2   overlapping portions of the resource.

1   38.   (Original) The medium of claim 26, wherein the instructions comprise

2   further instructions capable of directing the at least one processor to perform:

3   the resource locator comprising a Uniform Resource Locator (URL); and

4   inspecting the URL for a path component indicating the URL comprises the at

5   least partially obscured portion.

1   39.   (Original) The medium of claim 26, wherein the instructions for validating

2   client authorization to access the resource comprise instructions capable of directing the

3   at least one processor to perform:

4   hash-encoding an identity value associated with the client; and

5   providing the hash-encoded identity value and at least a portion of the resource

6   locator to an authorization manager configured to look up the hash-encoded identity

7   value and the at least a portion of the resource locator in an access control table.

1   40.   (Previously Presented) The medium of claim 26, wherein the client

2   communicates with the proxy by way of an Internet browser.

1   41.   (New) The method of claim 1, wherein said providing the resource to the

2   client comprises transcoding at least a portion of said retrieved resource received in a

3   first format into a different second format.

1   42.   (New) A method for a proxy to transparently provide access to resources

2   of a resource manager, comprising:

3   receiving from the client a resource locator for retrieving a resource from selected

4   ones of resource managers disposed within different machines, wherein the resource

5   locator comprises a network address identifying at least one of the resource managers,

6   and the resource locator being at least partially obscured to hide the network address;

Application No. 09/904,646
Amendment dated December 19, 2005
Response to Office Action of March 7, 2005

Atty. Docket No. 042390.P10469
Examiner Strange, Aaron
TC/A.U. 2153

7   validating client authorization to have the resource locator de-obscured, and if so,

8   de-obscuring the resource locator;

9   retrieving the resource from said selected ones of said resource managers

10 according to the de-obscured resource locator, said resource having at least a portion

11 encoded in a first format.

1   43.   (New) The method of claim 41, further comprising:

2   transcoding at least the portion in the first format into a different second format.